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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,183

04/08/2004

Edward Grivna

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1767

8791

7590

10/26/2005

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EXAMINER

WILLIAMS, HOWARD L

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/822,183	<b>Applicant(s)</b> GRIVNA, EDWARD	
	<b>Examiner</b> Howard L. Williams	<b>Art Unit</b> 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,6-16 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-16 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

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|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Claims 6 and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims are seen to substitute rather than further define the source evaluation.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.


Claims 1-4, 6-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,177,482 to Cideciyan et al. in view of U.S. Patent 5825309 A to Matsui et al. or Millman Microelectronics Digital and Analog Circuits and Systems. Cideciyan discloses a RLL encoder operating on plural bytes in parallel pipeline to encode the eight bit source words to ten bit codewords (8B/10B). Cideciyan discloses evaluating a source character to determine the state value for that character to determine whether the state value will be either changed or not changed by the byte as a function of the previous state and the state indicator for the current source word (37, fig. 2) (col. 7, lines 39-54). Figure 2 shows the system for one byte whereas figures 6A and 6B show the pipeline arrangement for operating on four input bytes by placing multiple copies of single encoder in parallel. Cideciyan discloses comparing the previous state bit (15; fig. 2) with the current state indication (33; fig. 2) to determine whether the current source word will cause state toggling, i.e. the claimed "flip/hold" bit of the present application. The state toggling indicator is produced as a function of the current input byte held in input register (11; fig. 2). In the single word depiction of figure 2 the previous state and current state toggle indicator are compared in the exclusive OR gate (XOR 31; fig. 2) and feedback to a portion of the register 11 [S(N)]. In the pipelined or plural byte embodiment figure 5 the state value is passed to next stage of the plural byte encoder (36A; fig. 5; 36 fig. 4). After the last stage the output of the state comparison is fed back to the first stage (36D; fig. 5).

Cideciyan calls box 37 simply logic circuitry (col. 7, line 48) stating that it is for deriving the next state based on the data byte. In other words, it is evaluating the source character. The examiner considers that this logic block would have been obvious to implement either in logic gates or a look-up table. This is supported by Matsui et al. wherein it is recognized that look-up tables are logic circuitry (col. 8, line 34) and Millman who teaches on page 199 in the chapter dealing with combinational logic systems, i.e. logic, and look-up tables specifically that "Clearly, any calculation for which a truth table can be written may be implemented with a ROM"

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard L. Williams at telephone number (571) 272-1815.

10/19/05  
Voice: (571) 272-1815

  
Howard L. Williams  
Primary Examiner  
Art Unit 2819